



**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re the Application of:

**Yoshiaki FUKUZUMI et al.**

Serial No.: 09/783,023

Filed: February 15, 2001

For: SEMICONDUCTOR DEVICE USING  
FUSE/ANTI-FUSE SYSTEM AND METHOD  
OF MANUFACTURING THE SAME

Atty. Docket No.: 001701.00059

Group Art Unit: 2823

Examiner: G. Fourson, III

Confirmation No.: 6061

# 7/A

Wm d f

J. M. Sullivan

1/7/03

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**AMENDMENT**

Commissioner for Patents  
Washington, D.C. 20231

Sir:

In response to the Office Action mailed September 6, 2002, please amend the instant application as follows:

**IN THE SPECIFICATION:**

Please amend the specification as follows:

The paragraph starting on page 1, line 5, has been amended as follows:

This application is based upon and claims the benefit of priority from the prior Japanese Patent Application No. 2000-039968, filed February 17, 2000.

The paragraph starting on page 5, line 9, has been amended as follows:

The anti-fuse is expected to produce various merits. For example, the anti-fuse is expected to decrease the area occupied within the chip and to permit replacing the final defective cell after sealing the package. Also, in the anti-fuse, a desired gate insulating film is broken to make the device conductive by applying a voltage higher than the breakdown voltage. Therefore, in general, the anti-fuse is connected to a high voltage generating circuit for breaking the gate insulating film and to a judging circuit for detecting whether the anti-fuse portion is broken or not. It follows that, in breaking the anti-fuse portion, the gate insulating film in the judging circuit portion also is damaged to some extent. Such being the situation, it was desirable

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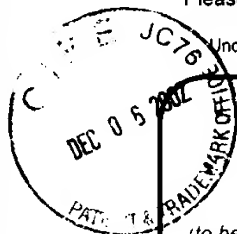
PTO/SB/21 (08-00)

Please type a plus sign (+) inside this box → ☐

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

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# TRANSMITTAL FORM

(to be used for all correspondence after initial filing)

<b>TRANSMITTAL FORM</b> (to be used for all correspondence after initial filing)		Application Number	09/783,023
		Filing Date	February 15, 2001
		First Named Inventor	Yoshiaki Fukuzumi et al.
		Group Art Unit	2823
		Examiner Name	G. Fourson, III
Total Number of Pages in This Submission		Attorney Docket Number	001701.00059

## ENCLOSURES (check all that apply)

<input checked="" type="checkbox"/> Fee Transmittal Form <input type="checkbox"/> Fee Attached <input checked="" type="checkbox"/> Amendment / Response <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input type="checkbox"/> Information Disclosure Statement <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Response to Missing Parts/Incomplete Application <input checked="" type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53	<input type="checkbox"/> Assignment Papers (for an Application) <input type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CD(s) _____	<input type="checkbox"/> After Allowance Communication to Group <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input type="checkbox"/> Appeal Communication to Group (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input type="checkbox"/> Other Enclosure(s) (please identify below):
Remarks <div style="border: 1px solid black; height: 40px; width: 100%;"></div>		

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 TECHNICAL SECTION 2800

## SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm or Individual name	Gary D. Fedorochko, Reg. No. 35,509
Signature	
Date	December 6, 2002

## CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Assistant Commissioner for Patents, Washington, D.C. 20231 on this date:

Typed or printed name			
Signature		Date	

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# FEE TRANSMITTAL for FY 2002

Patent fees are subject to annual revision.

☐ Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT (\$) 36

Complete if Known

Application Number 09/783,023  
Filing Date February 15, 2001  
First Named Inventor Yoshiaki Fukuzumi et al.  
Examiner Name Fourson III, G.  
Group / Art Unit 2823  
Attorney Docket No. 001701.00059

## METHOD OF PAYMENT (check all that apply)

☐ Check ☐ Credit card ☐ Money ☐ Other ☐ None  
Order

☒ Deposit Account:

Deposit Account Number 19-0733

Deposit Account Name Banner & Witcoff, Ltd.

The Commissioner is authorized to: (check all that apply)

☒ Charge fee(s) indicated below ☒ Credit any overpayments  
☒ Charge any additional fee(s) during the pendency of this application  
☐ Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account.

## FEE CALCULATION

### 1. BASIC FILING FEE

Large Entity		Small Entity		Fee Description	Fee Paid
Fee Code	Fee (\$)	Fee Code	Fee (\$)		
101	740	201	370	Utility filing fee	
106	330	206	165	Design filing fee	
107	510	207	255	Plant filing fee	
108	740	208	370	Reissue filing fee	
114	160	214	80	Provisional filing fee	

SUBTOTAL (1)

(\$ 0)

### 2. EXTRA CLAIM FEES

Total Claims	22	-20 **	=	2	X	18	=	36
Independent Claims	2	-3 **	=	0	X		=	0
Multiple Dependent					X		=	0

Large Entity		Small Entity		Fee Description
Fee Code	Fee (\$)	Fee Code	Fee (\$)	
103	18	203	9	Claims in excess of 20
102	84	202	42	Independent claims in excess of 3
104	280	204	140	Multiple dependent claim, if not paid
109	84	209	42	** Reissue independent claims over original patent
110	18	210	9	** Reissue claims in excess of 20 and over original patent

SUBTOTAL (2)

(\$ 36)

\*\*or number previously paid, if greater. For Reissues, see above

## FEE CALCULATION (continued)

### 3. ADDITIONAL FEES

Large Entity		Small Entity		Fee Description	Fee Paid
Fee Code	Fee (\$)	Fee Code	Fee (\$)		
105	130	205	65	Surcharge - late filing fee or oath or cover sheet	
127	50	227	25	Surcharge - late provisional filing fee or cover sheet	
139	130	139	130	Non-English specification	
147	2,520	147	2,520	For filing a request for reexamination	
112	920*	112	920*	Requesting publication of SIR prior to Examiner action	
113	1,840*	113	1,840*	Requesting publication of SIR after Examiner action	
115	110	215	55	Extension for reply within first month	
116	400	216	200	Extension for reply within second month	
117	920	217	460	Extension for reply within third month	
118	1,440	218	720	Extension for reply within fourth month	
128	1,960	228	980	Extension for reply within fifth month	
119	320	219	160	Notice of Appeal	
120	320	220	160	Filing a brief in support of an appeal	
121	280	221	140	Request for oral hearing	
138	1,510	138	1,510	Petition to institute a public use proceeding	
140	110	240	55	Petition to revive - unavoidable	
141	1,280	241	640	Petition to revive - unintentional	
142	1,280	242	640	Utility issue fee (or reissue)	
143	460	243	230	Design issue fee	
144	620	244	310	Plant issue fee	
122	130	122	130	Petitions to the Commissioner	
123	50	123	50	Processing fee under 37 CFR 1.17 (q)	
126	180	126	180	Submission of Information Disclosure Stmt	
581	40	581	40	Recording each patent assignment per property (times number of properties)	
146	740	246	370	Filing a submission after final rejection (37 CFR § 1.129(a))	
149	740	249	370	For each additional invention to be examined (37 CFR § 1.129(b))	
179	740	279	370	Request for Continued Examination (RCE)	
169	900	169	900	Request for expedited examination of a design application	

Other fee (specify) \_\_\_\_\_

\*Reduced by Basic Filing Fee Paid

SUBTOTAL (3)

(\$ 0)

## SUBMITTED BY

Complete (if applicable)

Name (Print/Type)	Gary D. Fedorochko	Registration No. Attorney/Agent)	35,509	Telephone	202-508-9100
Signature	<i>Gary D. Fedorochko</i>			Date	December 6, 2002

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